CENTER for STRATEGIC LEADERSHIP CSL

Collins Center Study
Center for Strategic Leadership,
U.S. Army War College

June 2009
Volume 1-09

China's Pursuit of Africa's Natural Resources

Kent Hughes Butts and Brent Bankus

This study was accomplished as part of a larger body of work. The entire volume, "Understanding Africa: A Geographical Perspective," can be accessed through the United States Military Academy geography department web site at: http://www.dean.usma.edu/departments/geo/Geog/Publications/Understanding%20Africa.pdf.

Key Points

- China's economic growth has exceeded its domestic resource base and has made it dependent upon imports for critical supplies of fuel and minerals.
- China's quest for resources is driving its significant presence in Africa.
- A natural ally of African states as leader of the developing world, China is using debt forgiveness, development aid and participation in African Peacekeeping Operations to gain influence and access to resources.
- It is unlikely that China's influence will exceed that of centuries old colonial economic and military ties.
- China's presence creates the potential for cooperation with the U.S. on stabilizing capacity building and development activities.

Introduction

Africa is a vast continent with diverse geographic patterns and a relatively limited population. The resource base of Africa is enormous, with powerful rivers, world leading concentrations of strategic minerals, and important petroleum and uranium deposits. Nevertheless, it is comprised mainly of developing states, with limited capacity and infrastructure. Western development strategies have failed miserably in Africa, falling victim to Cold War politics, cultural differences and Africa's colonial heritage. Long a friend of Africa in its self-declared role as leader of the developing world, China is in the midst of a resurgent African initiative based on a "politics free" development model aimed at securing access to Africa's resource supplies. This chapter examines China's African strategy, offers an assessment of its implications for United States (U.S.) national security, and suggests a proactive, interest based approach for dealing with this phenomenon.

The strategic landscape of Africa is defined by its geography. Africa's topography ranges from 5800 meter (about 19,000 feet) volcanic peaks with year-round ice fields to scorching deserts that limit settlement and commercial transportation, to brutally hot and humid river valleys teaming with malaria and other waterborne diseases, to resource rich coastlines swept by cold and nutrient rich currents. Within this enormous continent exist large numbers of social

---

Dr. Kent Hughes Butts is Professor and Director of the National Security Issues Group at the Center of Strategic Leadership, U.S. Army War College. A former U.S. Defense Attaché in Africa, his books include Geopolitics of Southern Africa: South Africa as Regional Superpower and Economics and National Security: the Case of China.

Lieutenant Colonel (Retired) Brent Bankus is a member of the National Security Issues Group, United States Army War College. Mr. Bankus has worked in Eritrea and Benin and was previously Director of Joint Training and Exercises, United States Army Peacekeeping Institute, and has been widely published on peacekeeping, homeland security and homeland defense topics.

Report Documentation Page			*Form Approved OMB No. 0704-0188*
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.			
1. REPORT DATE **JUN 2009**	2. REPORT TYPE		3. DATES COVERED **00-00-2009 to 00-00-2009**
4. TITLE AND SUBTITLE **China's Pursuit of Africa's Natural Resources**			5a. CONTRACT NUMBER
			5b. GRANT NUMBER
			5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)			5d. PROJECT NUMBER
			5e. TASK NUMBER
			5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Army War College,Center for Strategic Leadership,650 Wright Avenue,Carlisle,PA,17013-5049**			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release; distribution unlimited**			
13. SUPPLEMENTARY NOTES			
14. ABSTRACT			
15. SUBJECT TERMS			

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**14**	

and ethnic groups characterized by unique cultural values and languages. The cultural geography of the continent has, like the sand dunes of the Sahara, been swept by waves of cultural penetration—from Arab slave traders bringing the Muslim religion, to Western colonial exploitation that bifurcated nations and clans, and through the establishment of artificial political borders. This has generated a backwash of African socialism.

The economic geography of Africa has been defined by transportation and in particular, the seaborne movement of cargo and the penetration of the interior by railroads. Transportation established functional regions bound together by economic linkages that brought not just mineral cargoes and the resultant foreign exchange earnings, but also new ideas, expectations, and disease. The environment has been altered by these processes. Renewable resources have been exploited beyond recovery, and mineral exploitation has generated significant pollution that has rendered agricultural land infertile and given rise to social protest in a loss of governmental legitimacy. Stability in Africa can only be achieved by addressing these geographic variables through a process of cooperation between internal and external actors that recognizes this geographical diversity and its implications for governance. The most interesting external actor from the perspective of U.S. national security is China.

Emerging trends have the potential to further destabilize African countries. They include environmental security and climate change; urbanization; increased energy prices; and extremist ideology. Each of these issues has the potential to overwhelm the capacity of thinly staffed civilian bureaucracies and erode governmental legitimacy. Because of pre-existing tensions and pressures on the government from increasing population, ethnic and religious differences, and urban-rural economic discrepancies, none of these trends can be identified as the single cause of instability. However, they may serve as a multiplier effect, inflaming existing tensions into conflict or instability either within or between states.

Environmental security refers to situations where environmental issues may threaten or be used to promote national security or affect human security. Climate change is an environmental security issue that affects such variables as freshwater availability, soil fertility and productivity, disease, storm intensity and flooding–and directly affects governmental legitimacy. Environmental security issues and failed development schemes act as push factors that drive increased urbanization. Africa is rapidly urbanizing and is second only to South America in rate of urbanization. Uncontrolled migration to cities is swamping the social infrastructure, eroding government control of constantly expanding squatter camps rife with the drug trade, crime, and disease, and increasing food security problems (Cook, 2008). Dramatically higher energy costs is another problem, as they increase the outflow of scarce foreign exchange for fertilizer, fuel, and food imports, increase the cost of African exports, and limit development. These trends affect governmental legitimacy when a government is unable to satisfy demands placed upon the political system and may, thus, enhance the appeal of extremist ideology. Because these trends could threaten stability in strategically important mineral producing regions of Africa, they provide an opportunity for confidence building measures and multilateral cooperation on the part of industrial states seeking stability and long-term access to African resources. Astutely, China has already acted on this with alacrity.

China in Africa

China's interests in Africa are not new; China has long viewed itself as the leader of the developing world, and was involved in Africa as far back as the late 1 960s and early 1970s, providing development aid to African socialist regimes, and supporting anti-colonial insurgencies. The crown jewel of this development assistance was the Tanzania – Zambia Railway (TAZARA), which ran intermittently from Dar es Salaam in Tanzania to the copper cobalt belt of Zambia. The Chinese sent 13,500 workers to Africa to build the line and provided a $412 million interest free construction loan (Moritz, 1982). The TAZARA rail line was designed to carry 300,000 tons of copper from Zambia and Zaire and provide an alternative to depending on white governed, South African ports.

China's support of Robert Mugabe and Zimbabwe spans three decades. During Zimbabwe's Unilateral Declaration of Independence China provided logistical, training, arms and funding support to Mugabe's Zimbabwe Africa National Union (ZANU) liberation front. When Mugabe was elected he disbanded the rival political party and, with the support of China and the Shona speaking majority, has remained in power for over 25 years. While China retained many of its ties to Africa, it wasn't until the late 1980s that China began a renewed and focused presence on the continent, a presence driven by the need for resource access.

The major reason for China's renewed involvement in Africa is the need for access to Africa's natural resources, primarily energy and minerals. Since free market reforms were implemented in 1978, China's GDP has grown an average 9.9 percent a year (Hamlin, 2005). China is tapping into a variety of resource markets to feed their ever growing economy. The expense and extent of Chinese efforts to garner those resources is striking. China's intent is not to compete on the open market for natural resources, but to own them and their associated infrastructure to create a secure source of supply. In 2001, the Chinese Politburo set down its global *zou chuqu* ("go out") directive, instructing state-owned enterprises to seek long-term access to natural resources (Behar, 2008). Varying levels of financial help have accompanied this push, with state-owned Chinese construction companies in Africa receiving incentives ranging from export credits to government guarantees for bank loans. At the same time, state-controlled banks have made inexpensive loans available to private Chinese companies that invest abroad. As Lucy Corkin, a China-Africa think tank expert from Stellenbosch University in South Africa, explains, "It's trickled down to your micro-entrepreneurs. It's a huge diversification and fragmentation of Chinese commercial actors coming out of China" (Behar, 2008). The national security strategies of the George W. Bush administration are often characterized as having had three variables: diplomacy; development; and defense. China's efforts to come to grips with the diverse human and physical geography of Africa may be best examined through the lens of these three variables.

China's Mineral Diplomacy

China's voracious appetite for resources, especially energy resources, is widely viewed as the primary motive for its expanding outreach to Africa (Cooke 2008, 106).

The Chinese economy has been growing at between 7 and 10 percent per year since the 1980s and has doubled every decade. The Chinese Communist Party believes that China must continue this level of growth if it is to maintain its control of the government, continue the shift from inefficient state controlled industries, and deal with the ever-increasing social unrest. Protests over the collapse of poorly constructed government built schools during the 2008 earthquake and a rash of food safety issues are but the latest in a growing wave of government criticism. In 1993 there were 8700 public protests in China; by 2005 that number had risen to 87,000 (CRS Report for Congress, 2006). Dissent over issues such as employment, environmental degradation, social services, and government corruption grew 50 percent between 2004 and 2006 (CRS, 2006). While such protests do not currently have the power to topple the government, China's population will increase by approximately 123 million by 2025 from a current population of 1.3 billion and the government fears that without sufficient economic growth social protest could grow to a level that would threaten the Chinese Communist Party control (United States Census Bureau, 2008).

Continued economic growth in China requires access to foreign industrial and fuel minerals. In that regard, China is not unlike the United States in having a substantial natural resource base that has proven incapable of meeting the demands of an expanding domestic economy. Mineral imports are depended upon to supply the balance of industrial demand and the security of those mineral imports is of critical geo-strategic importance to both states. China is seeking many of its mineral supplies in Africa.

The Importance of Africa's Resources

At the height of the 1973 oil embargo, Soviet Premier Leonid Brezhnev clarified the Soviet Union's resource strategy to then Somalia President Siad Barre: "Our aim is to gain control of the two great treasure houses on which the West depends, the energy treasure house of the Persian Gulf and the mineral treasure house of Central and Southern Africa" (Nixon, 1980, 23).

During the Cold War, the Soviet Union supplied the West with chromium and manganese and used it to strategic advantage. In the wake of the Berlin blockade, the Soviets cut off supplies of these minerals. In 1978, the Soviet Union purchased a two year supply of cobalt immediately prior to the Cuban supported invasion of Zaire's (today, the Democratic Republic of Congo's) copper cobalt producing Shaba province. Moreover, after the departure of the Portuguese, the Soviet Union stepped in and turned both Angola and Mozambique into Marxist client states with Soviet equipment and trained armies that created a strategic pincher movement on the mineral producing giant South Africa. The oil embargo further enlightened the United States about the geopolitical importance of the imbalance of supply and demand for strategically

important resources, and the control of those resources by producing states or peer competitors. The Chinese have learned from this recent history and have developed a resource strategy aimed at ensuring adequate mineral imports to supply their rapacious economy. The most important aspect of China's resource strategy is its focus on establishing ownership or control of the mineral resource concession. Africa plays a significant role in that strategy.

The Soviet Union was autarkic, producing its industrial mineral supplies from domestic sources, except for small quantities of lateritic cobalt deposits imported from Cuba. Neither the United States nor its allies in Europe or Japan had sufficient domestic deposits of strategic minerals or petroleum. Vulnerable to a disruption of their mineral imports, the Western Allies focused clearly on the sources of petroleum and strategic minerals, and made resource access a salient tenet of their Cold War security strategy. Never was this clearer than when President Carter drew his line in the sand and declared the petroleum deposits of the Middle East vital to U.S. national security interests.

In the years since the end of the Cold War, however, the United States has sold off large portions of its strategic minerals stockpile, and now depends on the world market for most of its imports of petroleum and industrial materials. In the absence of a Soviet threat, the United States turned to the less costly free market strategy of purchasing mineral imports on the world market rather than concerning itself with the stability or alliances of mineral producing countries. If prices rose, the United States would simply outbid others for the minerals. For over fifteen years, the free market strategy has succeeded; however, the growth of the Chinese economy has outstripped its domestic supplies of critical industrial minerals and petroleum, created a rapacious new competitor for global resources, and substantially tightened the world commodity market. This is forcing the United States to examine its mineral import strategy and the national security implications of China's quest for mineral supplies.

Another trend is calling into question the free market strategy and its effects on U.S. national security. Mineral producing states that have been releasing their supplies to the world market are now constraining their availability based on political considerations. Venezuela and Russia are actively pursuing resource geopolitics as a way to promote a political agenda and further their national security interests. History has demonstrated that such policies discourage direct foreign investment in the mineral extraction industries, limit access to critical new technologies, and ultimately reduce mineral recovery. However, in the short term such policies may prove beneficial to the producing state.

The U.S. geopolitical position is further eroded by the fact that most of the conventional oil production is concentrated in the critical Middle East and controlled by Muslim states, which have already demonstrated a willingness to embargo shipments to the West for political reasons. Although the United States has 700 million barrels of oil stored in the Strategic Petroleum Reserve (SPR), the recent Government Accounting Office report on the SPR stated that it would be inadequate for dealing with the cutoff of the 10 million barrels per day (b/d) of petroleum produced by Saudi Arabia, or the 17 million b/d of petroleum that flows out of the Persian Gulf (GAO, 2006).

In light of these facts the importance of Africa's resources becomes clear. Although not a zero sum game, the international supply of minerals is tightening and China's demand for metals and petroleum is increasing almost exponentially and driving commodity prices to new levels. By 2004 China's economic growth had driven up global copper prices by 37 percent, oil by 33 percent and aluminum and zinc 25 percent. By 2007 copper prices were up 344 percent, nickel prices were up 760 percent, and zinc prices 218 percent (Coakley, 2008). China's role in setting world prices reflects the volume of its consumption; in 2003 China consumed: 25 percent of global aluminum and steel production; 32 percent of iron ore and coal production: and 40 percent of the world's cement (Menzie, 2006). Understanding, perhaps better than any other state, how its increasing demand and future expected consumption will further tighten world markets, China is taking action to create new reserves of these minerals and establish bilateral relationships that will ensure it of the new supply. The Chinese view the U.S. market strategy as being high risk and have taken a different path.

China's Import Dependence

China is the fastest growing energy consumer in the world; in 2003 China passed Japan to become the world's number two consumer of petroleum behind the United States (Wonacott, 2003). Once self-sufficient in petroleum production, China now imports 3.7 million b/d of oil of its daily consumption of 7.5 million b/d (USCC, 2007). During the last five

years, energy demand growth has been, on average, 13 percent per year (USCC, 2007). This trend is likely to continue. Manufacturing accounts for 60 percent of energy consumption in China and 28 percent of that is from the fast growing iron and steel sector (USCC, 2007). Lax environmental standards, government subsidies and its innate profitability will likely ensure little change of this consumption pattern. Moreover, affluence will drive an upsurge in transportation related petroleum consumption. Vehicle ownership in China is expected to reach 140 million by 2020, a significant increase from the 25 million vehicle owners in 2007. By 2025 as China's population increases another 123 million people, total oil consumption will be over 14 million b/d and China will likely import an additional 7.2 million b/d of foreign oil.

The source of China's oil imports is, therefore, of significant strategic importance and a focal point for China's state owned energy companies and its diplomatic corps. The politically unstable Middle East, led by Saudi Arabia, Iran and Oman, accounts for 44 percent of China's oil imports. Africa, led by Angola – the second largest single source of Chinese oil supply – the Sudan, and Nigeria, accounts for 32 percent of oil imports. Additionally, Russia supplies 11 percent of Chinese oil imports, via rail (International Energy Agency [IEA] 2007). Most of China's oil imports must transit the Malacca Strait and other key maritime choke points. The security of these choke points is guaranteed by the U.S. Navy; along with dependence on a U.S. dominated energy market, this is seen as a strategic vulnerability. China has a four concept strategy for minimizing this vulnerability: develop a blue water naval capability; develop a terrestrial, pipeline based petroleum import system from states such as Kazakhstan and Russia; create a strategic petroleum reserve of 100 million barrels to supplant 30 days of lost imports; and have Chinese oil companies purchase equity stakes in, explore for, and produce petroleum in foreign oil fields. While the equity stakes concept thus far accounts for only 600,000 b/d of oil imports, it is developing exploration, development, and negotiations skills within the state owned Chinese oil companies and making them a respected actor on the petroleum market stage (Morrison, 2008; IEA, 2007).

The bulk of the world's conventional oil reserves are located in the politically unstable Middle East. A distant second place is Europe and Eurasia, dominated by Russia, which is the largest oil-producing state. Close behind Russia is Africa with over 120 billion barrels of petroleum reserves. Because of its debt, lack of infrastructure, and governmental capacity, and its extensive natural resource base, Africa is benefiting substantially from China's mineral import diplomacy. China's state enterprises identify states with significant natural resource reserves and work closely with Chinese diplomats to design an engagement program with apropos economic and diplomatic benefits.

As it was during the Cold War, Africa remains a major supplier of strategically important minerals. Essential industrial metals such as aluminum, bauxite, coltan, alumina, copper, iron ore, lead, nickel, zinc, and the industrial minerals of phosphate rock, coal, and uranium are all present in Africa in large quantities. Particularly important are the strategic minerals of chromium, cobalt, platinum group metals, and manganese. For their strategic applications in weapons systems and critical economic processes, there is generally no substitute for these minerals. The reserve bases of these minerals are highly concentrated geographically in South Africa, Democratic Republic of Congo (DRC), Zimbabwe, and Zambia, and not present in China or the United States in sufficient quantities to meet demand.

For example, 33 percent of the world reserve base of chromium is found in the Republic of South Africa, and South Africa and Kazakhstan alone account for 95 percent of world chromium resources. Zambia and DRC have between them 52 percent of world cobalt reserves. South Africa has 77 percent of the world manganese reserve base and 88 percent of the reserve base for the platinum group metals (Minerals Commodity Summaries, 2008). The geographic concentration of these minerals and lack of alternative supplies or substitutes make them strategically important to China and other industrial states and contribute to China's intense interest in Africa.

China has moved aggressively to tie up mineral concessions in Africa. In 2008 China signed a long-term infrastructure development agreement with Democratic Republic of Congo worth over $9 billion (Whewell, 2008). At the same time, the DRC national mining company, Gecamines, agreed to ease the major mining company, Katanga Mining Ltd., out of the two key copper deposits, Mashamba West and Dikuluwe in the copper-cobalt belt, paying Katanga the equivalent of $825 million and granting the concessions to a Chinese company. Interestingly, the deposits were not scheduled to produce copper until at least 2020, and China could not bring them into production for at least five years (Katanga, 2008). This is a good example of how minerals access is linked to development in China's Africa strategy.

Development

China's African Policy is rooted in development and "mutually beneficial cooperation" (People's Republic of China, 2006). A natural ally based on its long-term role as champion of the developing world, China can offer debt forgiveness, bilateral trade agreements, development packages, and grant aid. China often packages its diplomatic, defense, and development aid into synchronized and synergistic offerings. Chinese investment in Africa in its various forms is often directly attributable to the natural resources China is able to procure from that continent. Unlike the United States, which ties its developmental aid to democratic reforms, fiscal transparency, and human rights, China insists only upon the isolation of Taiwan. The pursuit of this overriding objective is unambiguous and explicit: "The One China principle is the political foundation for the establishment of China's relations with African countries and regional organizations" (People's Republic of China, 2006).

China explains this One China concept as a respect for African states' autonomy in creating their own development programs, and a desire for their support in establishing a "new and rational economic order" (Cook, 2008, 106). Differences in these development models are illustrated by the Chinese approach to the Sudan, which supplies 5–7 percent of China's oil. China supported the UN Security Council Resolution 1769 creating a UN–African Union peacekeeping force for Darfur (UNAMID) and encouraged the Sudanese government to accept it. When President Hu Jintao visited the Sudan in 2007 he forgave debt totaling $80 million, announced the building of a new presidential palace with an interest free Chinese loan, and announced further infrastructure improvements, such as the building of a new railway, to complement the $2 billion Merowe Dam China is building, which could provide for Sudan's total electrical demand (Mallaby, 2007; Schihor, 2007; U.S.–China, 2007). China's African Policy document would characterize this as helping the Sudan "to develop and exploit rationally their resources" (People's Republic of China, 2006).

Colonial powers and the superpowers of the Cold War era were criticized for development efforts in Africa that left African countries as "hewers of wood and carriers of water." Besides Africa's strategic location and position astride major sea lines of communication, the chief interest of these two groups was African resources. China has now renewed its interest in Africa based upon a similar resource quest and is dedicating most of its development aid to natural resource rich states. Sudan, Algeria, Nigeria, Zambia, Zimbabwe, South Africa, Madagascar, and Angola have all received hundreds of millions of dollars in foreign direct investment (FDI), most of it dedicated to the exploration for, and exploitation and transport of resources. Gabon provides a good example. Chinese companies are targeting the Belinga iron ore reserves, which are located over 500 miles inland. To do so, China is investing several billion dollars to build a railway from the mine site to the coast and a deep water export terminal. Because electricity is unavailable, China will also build a hydroelectric scheme to provide power to mine the ore, process it, and transport it to the coast. China will have exclusive access to mine production (Amosu, 2007).

China is investing a great deal of money and resources rebuilding the infrastructure in its oil supplier Angola. China is providing $135 million in financing to rebuild Angola's electricity, water and road systems, expanding its stake in the oil-rich African state, Angola's state-run ANGOP news agency said recently (Simao, 2008). While the exact amount of the loan is unknown, it is estimated to range from $4 to $11 billion. In addition, China has agreed to help Angola establish a malaria prevention and treatment center in Angola's capital city of Luanda's General Hospital.

Trade between China and Angola is estimated to be approximately $5 billion per year. There is concern that the oil wealth will not be distributed among all regions of the state and will not reach the poverty stricken Angolans in the Ovumbundu regions, from which Jonas Savimbi fought the recently concluded civil war. Additionally, the thousands of jobs created by these huge construction projects are primarily going to Chinese workers and this is causing increased resentment by the local population. While the Angolan economy is growing at a rapid pace a majority of the population live in poverty; taking jobs that could be offered to the local population may exacerbate the situation (Geneticmemory.org, 2007).

The Chinese copper mining operation in Zambia is another example of China's investment. Because of its rich copper deposits, the Chinese government plans to make the Zambian Copper Belt Province one of a handful of "special economic zones" in Africa while investing a total of $800 million into a variety of improvement projects (Behar, 2008). Additionally, in efforts to form an export based "production chain," China plans on spending $220 million to build a new copper

smelter in the region. While Chinese mining companies employ local workers their reputation is coming under increasing scrutiny, particularly concerning their failure so far to offer competitive wages to those of the Indian, Canadian and Swiss mining companies also operating in the area (STRATFOR, 2008). In attempts to mitigate employee dissatisfaction and possible rioting, representatives from the Mineworkers Union of Zambia (MUZ) are accepting a salary increase offered by Chinese mine owners from $71–$114 per month to $85–$ 128 per month. However, research suggests this rate increase will not suffice as the salary rate at the Indian owned Konkola Copper Mines is $227–$284 per month, while workers at the Canadian-Swiss owned First Quantum Minerals mine receive $284–$426 per month (STRATFOR, 2008).

The Horn of Africa (HOA) is another region that has benefited from the Chinese incursion into the continent. Through its trade promotion and investment programs China has become one of the HOA's most important trading partners, providing low cost loans, debt relief and tariff considerations. Sudan and Eritrea have gained the most from these policies. By the first half of 2005, Chinese trade with the region topped $2 billion, compared to $2.8 billion for the entire year in 2004. China's investment in the HOA has been its most important contribution. In addition to road and housing construction projects, the Chinese have improved the bridging, power and water supply, irrigation, and telecommunications systems of the region. Examples of these projects include constructing: the Oratta Hospital in Asmara, Eritrea; Djibouti's Foreign Ministry; a highway system in Ethiopia's capital of Addis Ababa; and a hydroelectric power plant on Ethiopia's Tekeze River (Shinn 2005).

Another and more longstanding aspect of Chinese assistance on the African continent comes in the form of medical assistance. Sometimes called "Health Diplomacy," teams of Chinese doctors have been rendering medical aid on the continent since 1964 to complement regular medical personnel exchanges and technical training for medical professionals. China's medical assistance to Africa has also produced a robust program for the prevention of infectious diseases to include malaria and HIV/AIDS. This assistance includes training seminars and conferences, and supplying entire medical units as part of their military contingent to UN peacekeeping operations on the continent.

The refurbishment of the dilapidated Benguela railway stretching from Angola to Democratic Republic of Congo (DRC) is a prime example of Chinese investment in large infrastructure projects. The China International Fund Ltd, based in Hong Kong, is undertaking the $300 million rehabilitation project. The Benguela line was a significant transport link to the mineral rich Zaire and a vehicle for the export of manganese. The rail line has been neglected for a long period and was critically damaged during the Angolan civil war, which lasted from 1975 through 2002 (Emerging Minds, 2008; AsiaNews.it, 2006).

Mineral rich DRC provides an example of the assistance China will provide. China is not only acquiring natural resources itself, but also rebuilding critical infrastructure to ensure access. In addition, China recently signed a contract with DRC worth $6 billion to build approximately 3900 kilometers (2400 miles) of road, 3200 kilometers (2000 miles) of railway, 32 hospitals, 145 health centers and two universities (Whewell, 2008).

Chinese FDI in Africa was approximately $5 million annually in 1991, but by 1994 it was $25 million and in 1999, around $100 million. In 2006 China's FDI in Africa was $1.25 billion, and some sources, such as The People's Daily, believe that it exceeded $6 billion in 2007 (Amosu, 2007; Broadman, 2008). Trade with China is growing with equally impressive speed. In the 1 980s trade between China and Africa totaled $12 million per year. However by 2000, trade had grown to $10 billion (Amosu, 2007). Growing at an annual rate of 40 percent, China-Africa bilateral trade reached $50 billion in 2006 (Caggeso, 2007).

China's trade with Africa is facilitated by a sophisticated Chinese investment scheme. In October 2007 the Industrial and Commercial Bank of China, by market value the largest in the world, purchased South Africa's Standard Bank Group Ltd. for $5.4 billion. Standard, operating in 18 African countries, leads all banks in African loans and has assets of nearly $120 billion (Caggeso, 2007). China complemented this purchase by acquiring a stake in the United Kingdom banking house of Barclays. Using the $200 billion assets of the China Investment Corp., China paid $3 billion for a stake in the U.S. investment banking firm Blackstone. Blackstone then helped the China Development Bank acquire a $7 billion stake in Barclays Bank, the United Kingdom's leading African bank, with dominant positions in such resource powers as Nigeria, South Africa, Zambia, and Zimbabwe. These purchases guarantee Chinese access to powerful interests in the

financial community of key African countries, and facilitate investment through non-bilateral government to government arrangements (Weidner, 2007; Preston, 2007; Barnett, 2007).

China's development miracle occurred in an authoritarian state where the demands on the political system are more easily managed. China's development model may not prove as successful in Africa. Africa is increasingly democratic and, as the recent election in Zambia demonstrates, the legitimacy of governments and popular support for their leaders will turn upon the leaders' capability to meet human security demands upon the political system.

Although the large scale development projects come with no strings, China's development assistance will cause social, economic and environmental changes in recipient states and regions. This should be part of China's calculus. If there is not "mutual benefit, reciprocity and common prosperity" (People's Republic of China, 2006), China's economic and political objectives may not be realized; unintended consequences will occur.

In Zimbabwe the cholera outbreak that began in August 2008 and had killed 600 by year's end drew attention to failure of the Mugabe rule. This long-term and abysmal rule was abetted by China, as China's long term support encouraged President Mugabe to avoid necessary policy decisions. As a result Zimbabwe's major foreign exchange-earning mines closed, interest rates reached 9500 percent, inflation rocketed to 230 million percent, and the unpaid Army (and others) began looting banks (The Assay, October 2008).

Along the vital Nile River, the African riparian states created and their water ministers led the Nile Basin Initiative (NBI). The objectives of this multi-lateral initiative are to "develop the Nile Basin water resources in a sustainable and equitable way to ensure prosperity, security and peace for all its peoples" (Nile Basin, 2008). Boutros Boutros-Ghali, then Egypt's Minister of State for Foreign Affairs and later Secretary-General of the UN, famously stated in 1985 that wars of the future would be fought over water. The Sudan circumvented the NBI process by approaching China for support in building the Merowe Dam, which China agreed to do. Water experts consider this agreement to be de-stabilizing and an unhealthy action in terms of diminishing African multi-state solidarity.

China promoted its African Policy primarily through bilateral, government to government, secretive agreements, which have increasingly drawn public criticism. Beyond the expected criticism from former colonial powers and the West, African voices are now being heard. Then-South African President Thabo Mbeki cautioned China against dumping its low-cost textile and plastics products in Africa, thus denying Africans manufacturing jobs, and South Africa has placed a quota on imports of Chinese textiles (Cook, 2008). In the recent Zambian presidential elections the opposition made a major issue of unsafe operating conditions in Chinese manufacturing plants and noncompetitive rates paid to Chinese metallurgical workers as a result of deals cut with the Zambian government. Concern in Africa that China is pursuing a neocolonialist agenda is reinforced by the fact that the bulk of Chinese infrastructure development projects require 70 percent of workers to be Chinese with only 30 percent coming from the local African labor pool. An estimated 750,000 Chinese have relocated to Africa in the last 10 years (African Politics Portal, 2008). This African concern is causing China to review its trade approach.

China's Military Presence

China's military presence in Africa is limited but well focused. It has the potential to provide solid support to China's African strategy, strengthening ties to the African Union while ensuring its access to strategically important minerals. China's military involvement has three significant areas: arms sales, training and capacity building, and peacekeeping operations.

At first glance Chinese weapons sales do not appear significant as the United States , Russia, France, and Great Britain far outdistance China. From 2003 through 2006 the United States and Russia were among the leaders of weapons sales world-wide representing 37.6 percent and 16.9 percent respectively, while China supplied a paltry $1.3 billion worth of weapons representing only 2.9 percent of the total. However, for the same period China ranked third in weapons sales to the African continent. The sales are predominately small arms and ammunition. However, the Chinese have supplied some states with major end items such as armored fighting vehicles, wheeled vehicles of several types, artillery pieces, several types of jet fighters, and training and transport aircraft. One reason Chinese military products are so attractive to

developing states in Africa is their low cost and simplicity, a prime example being the Chinese version of the Russian AK-47 Assault Rifle (Congressional Research Service, 2008).

China has been using military assistance as another vehicle to cement oil and trade agreements in Africa. For example, in 2005 Angola exported 17.5 million tons of crude oil to China, making it China's second largest oil supplier. In exchange China negotiated major housing contracts aimed at improving Angola's infrastructure. One contract included constructing the residences of many Angolan leaders. They have also provided the Angolan armed forces with eight Chinese built Su-27 SK fighter jets in addition to various types of small arms.

The resource rich African state exhibiting the greatest Chinese military influence is Sudan. Widely criticized for the genocide in Darfur, Sudan has purchased a variety of armaments from China. Its inventory of Chinese military equipment and weaponry includes cargo trucks, main battle tanks and fighter and transport aircraft. Other Chinese made weapons include mortars, field artillery pieces, rocket launchers and air defense weapons (Chang, 2007). In exchange, China receives more than 90 percent of Sudan's oil exports ($4.7 billion worth of oil in 2006) and 75 percent of their total exports (Human Rights First, 2008). Moreover, China stations 4500 military personnel in the country to protect its multi-billion dollar oil infrastructure.

Zimbabwe also has a long history of cooperation with China to include military assistance. In the 1970s China became a staunch ally of Robert Mugabe, as it supplied his Zimbabwe African National Union (ZANU) guerrillas with arms and ammunition to fight the white rule in Rhodesia (Schaefer, 2008). Since then it has supplied mineral rich Zimbabwe with a variety of armaments ranging from small arms and ammunition, to a variety of armored fighting vehicles (Type 59 and Type 69 Tanks and Type 63 armored transport vehicles), and jet aircraft (FC-1 and J-7 fighters, and K-8 trainer aircraft). Additionally, China supplied the Mugabe regime with short wave radio jamming equipment, ostensibly to jam radio traffic from his political opposition as well as the Voice of America. Just prior to Mugabe's 2005 re-election, China also supplied Zimbabwe with riot equipment for the anticipated public protests (Bhola, 2007; Chang, 2007).

The Republic of Congo is one of China's largest sources of oil supplies and hardwoods. In 2005 it exported 5.5 million tons of crude oil to China, amounting for approximately 4.4 percent of China's total oil imports. Since there is still an international arms embargo on Congo, it is unlikely although not impossible for China to continue to sell military equipment to the troubled area. However, the Congo military forces are already armed with major Chinese end items: Type 59 tanks (30), Type 63 107-mm rocket launchers (30), Type 60 122-mm howitzers, and Type 59 130-mm cannons. Additionally, the Congolese own various types of Chinese mortars and an unknown amount of small arms and related ammunition (Chang, 2007).

Due in part to Egypt's oil reserves, it too has benefited from China's military assistance programs. The largest armaments transaction between the two has been for Egypt's production under a license agreement from China, of 80 K-8 trainer aircraft worth approximately $347 million. In 2005, Egypt ordered another 40 K-8 trainers making the total number 120 training aircraft with approximately 53 Chinese built J-7 fighter aircraft still in service in the Egyptian air force (Chang, 2007).

China's military influence is also notable in several other African states. For instance, in 2006 China sold Algeria a 5 million kilogram (5500 ton) training ship, and three 450,000 kilogram (500 ton) missile fast craft with C802 ship-to-ship missiles. In 2001 China delivered a 360,000 kilogram (400 ton) class patrol boat to the Mauritanian navy. Zambia and Namibia have also acquired Chinese K-8 training aircraft. Other weapons customers include Equatorial Guinea, Ethiopia, Eritrea, Burundi, Tanzania and Nigeria. In 2005 Nigeria spent $251 million buying Chinese jet aircraft, 12 F-7 NI and three FT-7 NI fighters. At the same time China and Nigeria reached a trade agreement in which Nigeria will supply China with 30,000 bpd of crude oil between 2005 and 2010 (Kolas, 2007). As part of their arms and equipment agreements, China's military influence extends to supplying "technical advisors" to its African clients and conducting educational and training courses. Chinese military influence is expanding with the growing number of Chinese defense attaché offices and increased participation in United Nations African Peacekeeping Operations. To date China maintains 14 attaché offices located in the states of Algeria, Democratic Republic of Congo, Egypt, Ethiopia, Liberia, Libya, Morocco, Mozambique, Nigeria, Namibia, Sudan, Tunisia, Zambia and Zimbabwe (Puska, 2007). Supplementing the work of their African attaché offices, the Chinese have conducted a number of military staff visits to Africa and have sponsored repeated security talks

with South Africa. From 2001 to 2006 China conducted over 30 military staff visits to the African continent, with Egypt receiving 15 of those. The Chinese Navy has occasionally visited African ports of call, but does not have a significant naval presence (Puska, 2007). Undoubtedly, the most important aspect of Chinese military presence has been their increased involvement in United Nations (UN) Peacekeeping Operations. Since 1990 the Chinese military has supplied UN Peacekeeping operations with police, military observers and organized military units. China's military supplies assets to 10 of 16 active UN Peacekeeping operations including six of seven operations in Africa; the Sudan; Darfur; Ivory Coast; Liberia; Congo and Western Sahara. In the Western Sahara operation, China provides military forces and the force commander, Major General Zhao Jingmin. The Chinese also support peacekeeping missions in Haiti, Timor Leste, Lebanon, and the Middle East (United Nations, 2008). Their support for UN and African Union Peace Operations is a politically wise decision that gains public support and good will at a time when they are being criticized for supporting African states with questionable human rights records.

Conclusion

It is important to put China's African presence in context. If the United States is uncertain how to approach China, as friend or foe, China is similarly ambivalent. The differences in the approaches of the Clinton and G.W. Bush administrations were substantial; China has many reasons to question U.S. intentions. China views the United States as the global hegemon and expects it to take actions to maintain that position. Given the U.S. history of a containment strategy against the former USSR, many in China see the current U.S. system of alliances with Japan, South Korea, Taiwan, Vietnam, Thailand, India, and most recently Central Asia as an effort to contain China. Although the Bush administration regularly condemned China's growing defense budget ($37.7 billion in 2005), the Chinese feel dwarfed by the annual U.S. defense budget of nearly $500 billion ($478 billion in 2005) (U.S.–China, 2007). China's limited domestic oil production makes it dependent upon Middle East oil for 90 percent of its oil imports, and some Chinese speculate on the geopolitical motivation behind the U.S. invasion of Iraq and efforts to sanction Iran, where China recently invested $100 billion in the oil and natural gas industry. Moreover, the Chinese view the commodity markets and international political and economic institutions as serving the interests of the West. The three Breton Woods institutions – the International Monetary Fund, the World Bank, and the World Trade Organization (formerly General Agreement on Tariffs and Trade) – have traditionally favored developing states with a Western orientation. This perception was reinforced by the appointment in 2005 of former Deputy Secretary of Defense Paul Wolfowicz to head the World Bank. (AFP, 2008; Prensa-Latina, 2008). This view of U.S. intentions contributes to China's African Policy and its geopolitical focus on securing resource imports

China's "go out" strategy has not yet guaranteed access to significant quantities of petroleum or minerals. It is too early to say for sure whether or not China's state owned companies will become major players in the oil and metals arena or if they will be overwhelmed and needlessly overpay for marginal concessions that fail to make a meaningful contribution to China's mineral import security. However, there is no doubt that China's quest for mineral security is providing substantial political influence with the beneficiaries of its African development strategy. At a time when U.S. foreign policy has been characterized by some states as unilateral and heavy-handed, with narrow restrictions that limit which states qualify for developmental assistance, the Chinese have been using their trade account surplus and sovereign wealth to support a new development model with, practically speaking, only one qualification – the One China Principle.

China's packaging of resource access agreements with a "no strings" development model and military training and hardware affects states that are strategically important to the U.S., such as Nigeria and Angola (Chang, 2007). Yet, China's presence in Africa is encountering problems and it appears that China and the United States both could benefit from cooperation dedicated to building capacity, sustaining governments, and promoting stability.

China's development focus on Africa is based on resource access and direct resource purchase agreements. Yet, its efforts to pursue resource based bilateral agreements are having mixed results. China receives only 600,000 b/d of petroleum from equity resource ownership while efforts to establish such ownership are creating a backlash of public criticism in Africa, where only two of China's trading partners, Angola and Sudan, have a positive trade balance with China. From Zambia, where China's relationship with the president became an embarrassment during the reelection campaign, to Zimbabwe,

where the international community joined forces to stop Chinese weapons shipments to the oppressive Mugabe regime, China is recognizing the downside of its "no strings" developmental approach to Africa and its emphasis on resource ownership. The effort to control resources may in fact complicate China's other objectives of creating welcome markets for Chinese products and creating support for a new just and rational economic order.

Stable states with sound governance are considered a better investment risk than failing states beset with internal violence and dissent. It is worth considering that China has a vested interest in working with the United States and other donor states to create stability across Africa, where the resource-based economies of one state may depend upon the transport infrastructure, power grid and social stability of multiple neighbors. Moreover, cooperating in an effort to create greater stability on the African continent would create substantially more development – and therefore more African markets for China's goods – and also create greater potential for Africa to capitalize on its comparative advantage of cheap labor and, perhaps, become a future breadbasket for China.

Africa is resource rich and a potential market for Chinese manufactured goods, and China will gain influence through its investment and increase its access to industrial resources in a future resource constrained market. However, China's investment in Africa is targeted on resource rich states and is smaller than that of Western investors. It is unlikely that China will stage a takeover of the continent where centuries-old colonial economic and military ties offer significant influence without the unwelcome side effects. In fact as it is currently practiced, China's development strategy runs the risk of promoting corruption, creating environmental problems, stunting manufacturing development, and creating ill will from the dumping of low-cost Chinese consumer goods. Moreover, the slumping world economy is likely to minimize African investment and mineral resource development for the near term.

Cooperation would be particularly valuable in helping African states adapt to the effects of climate change, address fresh water availability issues, and develop local medical capabilities. These human security issues place demands upon fragile governments of limited capabilities and contribute to regional and state instability. Broadening China's developmental assistance, trade, and FDI objectives to include these human security and stability issues of sustainable development could complement the work of other donor organizations and states. It could, as China's support for African peacekeeping efforts demonstrates, be undertaken without undue focus on the differences between China and the West over conditionality of aid. Such an approach would serve as a confidence building measure between China and the U.S. at a time when the Obama presidency offers the opportunity to redefine the U.S.-China relationship and prevent China's resource quest in Africa from becoming a zero sum game.

References

AFP. 2008. "Asian nations agree to reform international financial system." http://www.france24.com/en/20081025- asian-european-leaders-tackle-climate-energy-security-asem-beijing-financial-crisis (accessed December 5, 2008).

African Politics Portal. 2008. *Top Ten Misconceptions about Chinese Investment in Africa*. http://codrinarsene.com/2008/07/top-10-misconceptions-about-chinese-investment-in-africa/ (accessed December 5, 2008).

Amosu, Akwe. 2007. *Foreign Policy in Focus*. "China in Africa: It's (Still) the Governance, Stupid." http://www.fpif.org/fpiftxt/4068 (accessed December 5, 2008).

AsiaNews. 2006. "Angola is China's Main Oil Supplier." http://www.asianews.it/index.php?l=en&art=5821 (accessed December 5, 2008).

Assay, The. 2008. A Bi-Monthly Compilation by the U.S. Mission, Pretoria, South Africa. Issue 6, May 2008.

Baldauf, Scott, and Peter Ford. 2008. "China Slammed For Arming Zimbabwe's Mugabe." http://majimbokenya.com/home/2008/04/23/china-slammed-for-arming-zimbabwes-mugabe/ (accessed December 5, 2008).

Barnett, Antony, and Christopher Thompson. 2007. "Barclays' Millions Help Prop Up Mugabe Regime." http://www.guardian.co.uk/money/2007/jan/28/accounts.Zimbabwenews (accessed December 5, 2008).

BBC News. 2007. "China in Africa, Developing Ties." http://news.bbc.co.uk/2/hi/africa/7086777.stm (accessed December 5, 2008).

BBC News. 2007. "China in Africa, Friend or Foe." http://news.bbc.co.uk/2/low/africa/7086777.stm (accessed December 5, 2008).

BBC News. 2008. "China Ships Food Aid to Zimbabwe." http://news.bbc.co.uk/2/hi/africa/7170374.stm (accessed December 5, 2008).

BBC News. 2008. "Cholera Outbreak Strikes Zimbabwe." http://news.bbc.co.uk/2/hi/africa/7742762.stm (accessed December 5, 2008).

Behar, Richard. 2008. "Mining Copper in Zambia." http://www.fastcompany.com/magazine/126/zambia-chinas-mine-shaft.html?page=0%2C0 (accessed December 5, 2008).

Bhola, Gauarav. 2007. "China and India Battle for Influence in Africa: Part 4." http://www.gimmiethescoop.com/china-and-india-battle-for-influence-in-africa-part-4 (accessed December 5, 2008).

Broadman, Harry G. 2008. "New Trade Directions for Africa on Asia's Silk Road." *The World Bank*. http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/AFRICAEXT/0,,cont entMDK:21056305~pagePK:146736~piPK:146830~theSitePK:258644,00.html (accessed December 5, 2008).

Caggeso, Mike. 2007. "China Drills into Africa with $5.4 Billion Investment." *Investment News: Money Morning*. http://www.moneymorning.com/2007/12/04/china-drills-into-africa-with54-billion-investment/ (accessed December 5, 2008).

Campos, Indira and Alex Vines. 2007. "Angola and China, a Pragmatic Partnership." Paper Presented at a CSIS conference. *Prospects for Improving U.S.-China-Africa Cooperation*. http://www.csis.org/media/csis/pubs/080306_angolachina.pdf (accessed December 5, 2008).

Center for Naval Analyses. 2007. "National Security and the Threat of Climate Change. "http://securityandclimate.cna.org/report/ (accessed December 5, 2008).

Cheng, Eva. 2005. "China: Protests Escalate. Green Left on Line." http://www.greenleft.org.au/2005/639/33964 (accessed December 5, 2008).

China Daily. 2008. "China's Economic Growth Cools to Slowest Since 2005." Bloomberg L.P. http://www.chinadaily.com.cn/china/2008-07/17/content_6857053.htm (accessed December 5, 2008).

Chang, Andrei. 2007. "Chinese Arms and African Oil." *Space Daily*. http://www.spacedaily.com/reports/Analysis_Chinese_arms_and_African_oil_999.html (accessed December 5, 2008).

Chang, Andrei. 2008. "China exports attack craft to Sudan." *UPI Asia*. http://www.upiasia.com/Security/2008/09/16/china_exports_attack_craft_to_sudan/4697/ (accessed December 5, 2008).

Christensen, Thomas J. and James Swan. 2008. "U.S. Relations with the Peoples Republic of China." http://hongkong.usconsulate.gov/uscn_archives.html (accessed December 5, 2008).

Christensen, Thomas J. 2008. "Shaping China's Global Choices Through Diplomacy." http://www.state.gov/p/eap/rls/rm/2008/03/102327.htm (accessed December 5, 2008).

Coakley, George. 2008. "Director African Minerals Group, U.S. Geological Survey." Lecture at U.S. Army War College, Carlisle, PA. March 23, 2008.

Collier, Paul. 2008. "China's Investment in Africa." *China Digital Times.* http://chinadigitaltimes.net/2008/06/paul-collier-chinas-investment-in-africa/ (accessed December 5, 2008).

Cook, Nicolas. 2008. *China's Foreign Policy and "Soft Power" in South America, Asia, and Africa.* http://www.fas.org/irp/congress/2008_rpt/crs-china.pdf (accessed December 5, 2008).

Congressional Research Service Library of Congress. 2008. *China's Foreign Policy and "Soft Power" in South America, Asia and Africa.* http://www.fas.org/irp/congress/2008_rpt/crschina.pdf (accessed December 5, 2008).

Congressional Research Service (CRS) Report for Congress. 2006. *Social Unrest in China.* http://fas.org/sgp/crs/row/RL33416.pdf (accessed December 5, 2008).

Donnelly, John. 2005. "China Scooping up deals in Africa as U.S. firms hesitate." *Boston Globe.* http://www.boston.com/news/world/asia/articles/2005/12/24/china_scooping_up_deals_in_af%20rica%20_as%20_us%20_firms%20_hesitate/ (accessed December 5, 2008).

Emerging Minds, Organizing the Minds of the Future. 2008. China Plans to Construct Railway Across Sub-Saharan Africa. http://emergingminds.org/China-plans-to-construct-railway-across-Sub-Saharan-Africa-sources-say.html?ca_tid=46 (accessed December 5, 2008).

Genetic Memory. 2007. "China fund Rebuilding Angola." http://geneticmemory.org/joomla/index2.php?option=com_content&do_pdf=1&id=191 (accessed December 5, 2008).

Goodman, Leslie. 2008. "Angola-China Relations." *Sino Africa Virtual Institute*. http://sinoafrica.org/2008/10/17/angola-china-relations/ (accessed December 5, 2008).

Government Accounting Office (GAO). 2008. "Strategic Petroleum Reserve: Options to Improve the Cost-Effectiveness of Filling the Reserve." http://www.gao.gov/products/GAO-08-521T (accessed December 5, 2008).

Grobler, John. 2008. "Rebuilding a Nation." *Mail and Guardian.* http://www.mg.co.za/article/2008-09-06-rebuilding-a-nation (accessed December 5, 2008).

Hamlin, Kevin and Li Yanpin. 2008. "China's Economic Growth Cools to Slowest Since 2005." http://www.bloomberg.com/apps/news?pid=20601087&sid=a1wzyfR20ARs&refer=home (accessed December 5, 2008).

Hanson, Stephanie. 2008. "China, Africa, and Oil." *Washington Post.* http://www.washingtonpost.com/wp-dyn/content/article/2008/06/09/AR2008060900714.html (accessed December 5, 2008).

Human Rights First. 2008. "China's Arms Sales to Zimbabwe Fact Sheet." http://www.humanrightsfirst.info/pdf/080428-CAH-china-zimbab-arms-fs.pdf (accessed December 5, 2008).

Human Rights First. 2008. "Arms Sales and other Support to Abusive Regimes: Sudan, Burma, Zimbabwe, Sri Lanka, North Korea." http://www.stoparmstosudan.org/pages.asp?id=23 (accessed December 5, 2008).

International Energy Agency. 2007. http://www.uscc.gov/annual_report/2008/08_annual_report.php (accessed 5 December 2008).

Jamestown Foundation China Brief. 2005. "China's Soft Power in Africa: From the Beijing Consensus to Health Diplomacy." http://www.jamestown.org/publications_details.%20php?volume_id=408&issue_id=349%201%20&article%20_id=2370720 (accessed December 5, 2008).

Katanga Mining Unlimited. 2008. "Katanga Announces Agreement of Transfer of Mashamba West and Dikuluwe Deposits." *Marketwire*. http://www.marketwire.com/press-release/Katanga-MiningLimited-TSX-KAT-819163.html (accessed December 5, 2008).

Kolas, Ashild. 2007. "China in African oil: Guilty as charged?" *Economists for Peace and Security*. http://www.epsusa.org/publications/newsletter/2007/june2007/kolas.htm (accessed December 5, 2008).

Makonese, E. M. 2008. "Barclays Bank of Zimbabwe, Limited Unaudited Financial Statements for the Half-Year Ended 30 June 2008, Old Currency." *Barclays.* http://www.barclays.com/africa/pdfs/half_year_results_zimbabwe_2008.pdf (accessed December 5, 2008).

Mallaby, Sebastian. 2007. "A Palace For Sudan; China's No-Strings Aid Undermines the West." *Washington Post.* http://pqasb.pqarchiver.com/washingtonpost/access/1210595841.html?dids=1210595841:1210595841&FMT=ABS&FMTS=ABS:FT&date=Feb+5%2C+2007&author=Sebastian+Mallaby&pub=The+Washington+Post&edition=&startpage=A.15&desc=A+Palace+For+Sudan%3B+China%27s+No-Strings+Aid+Undermines+the+West (accessed December 5, 2008).

Mineral Commodity Summaries. 2008. *U.S. Department of the Interior, U.S. Geological Survey.* http://minerals.usgs.gov/minerals/pubs/mcs/2008/mcs2008.pdf (accessed December 5, 2008).

Moritz, F.A. 1982. "Chinese Leaders Tour Africa With Few Gifts in Their Sack." *Christian Science Monitor*. http://www.csmonitor.com/1982/1222/122250.html (accessed December 5, 2008).

Morrison, J. Stephen 2008. "Testimony before the U.S. Senate, Committee on Foreign Relations, Sub-committee on African Affairs." *Hearing on China in Africa; Implications for U.S. Policy.* June 4, 2008.

Nile Basin Initiative. 2008. *NBI Background*. http://www.nilebasin.org/index.php?option=com_content&task=view&id=13&Itemid=42 (accessed December 5, 2008).

Nixon, Richard M. 1980. *The Real War.* New York: Warner Books.

People's Republic of China. 2006. *China's African Policy.* http://www.gov.cn/misc/2006-%2001/12/content%20_156490.htm (accessed December 5, 2008).

Prensa Latina. 2008. "Russia, China: Joint Efforts to Change Financial System, Havana, Cuba." *Latin American News Agency.* http://www.plenglish.com/article.asp (accessed December 5, 2008).

Preston, Robert. 2007. "China Could Buy Stake in Barclays." *BBC News.* http://news.bbc.co.uk/2/hi/business/6911138.stm (accessed December 5, 2008).

Puska, Susan. 2007. "Military backs China's Africa adventure." *Asia Times.* http://www.atimes.com/atimes/china/if08ad02.html (accessed December 5, 2008).

Reuters Foundation. 2006. "FACTBOX – Why is Africa Chasing African Oil." *Alert Net.* http://www.alertnet.org/thenews/newsdesk/SP175749.htm (accessed December 5, 2008).

Schaefer, Brett D., and John J. Tkacik,. Jr. 2008. "Zimbabwe's Enabler: How Chinese Arms Keep Mugabe in Power." *The Heritage Foundation.* http://www.heritage.org/Research/africa/wm1997.cfm (accessed December 5, 2008).

Shinn, David. 2007. An opportunistic ally: China's increasing involvement in Africa. *All Business*. http://www.allbusiness.com/government/government-bodies-offices-government/5504463-%201.html (accessed December 5, 2008).

Shinn, David, and Joshua Eisenman. 2005. "Dueling Priorities for Beijing in the Horn of Africa." *China Brief, Jamestown Foundation*. http://www.jamestown.org/publications_details.php?volume_id=408&issue_id=3491&article _id=2370720 (accessed December 5, 2008).

Shichor, Yitzhak. "China's Darfur Policy." *Association for Asian Research*, May 1, 2007. http://www.asianresearch.org/articles/3039.html (accessed December 5, 2008).

Simao, Paul. 2008. "China expands credit line to oil-rich Angola." *Reuters Foundation Alert Net*. http://www.alertnet.org/thenews/newsdesk/L0460226.htm (accessed December 5, 2008).

STRATFOR. 2008. "Zambia: Copper, the Chinese and Electoral Strategy. http://www.stratfor.com/analysis/zambia_angry_copper_miners_chinese_and_electoral_strategy (accessed December 5, 2008).

United Nations. Welcome/Peace and Security/Peacekeeping/Current Operations. http://www.un.org/Depts/dpko/dpko/currentops.shtml#africa (accessed December 5, 2008).

United States Census Bureau. 2008. International Data Base, Country Summary: China. http://www.census.gov/ipc/www/idb/summaries.html (accessed December 5, 2008).

United States-China Economic and Security Review Commission (USCC). 2007. *China's Energy Consumption and Opportunities for U.S.-China Cooperation to Address the Effects of China's Energy Use.* 110th Cong., 1st sess. http://www.uscc.gov/hearings/2007hearings/transcripts/june_14_1%205/07_06_14_1%205_trans.pdf (accessed December 5, 2008).

U.S.-China Economic and Security Review Commission. *2007 Report to Congress.* 110th Cong., 2nd sess. http://www.uscc.gov/annual_report/2008/annual_report_full_08.pdf (accessed December 5, 2008).

Weidner, David. 2007. "China leans on Blackstone for Barclays Deal." *Market Watch.* http://www.marketwatch.com/news/story/blackstone-does-matchmaking-barclays-chinadeal/story.aspx?guid=%7B750F 1FC3- 1 C02-4B 1E-AF85-E 1 5A44 1 8CFE5%7D (accessed December 5, 2008).

Whewell, Tim. 2008. "China to seal $9bn DR Congo deal." *BBC News.* http://news.bbc.co.uk/2/hi/programmes/newsnight/7343060.stm (accessed December 4, 2008).